USDA Service Center Initiative
Geospatial Data Acquisition, Integration and Delivery
Business Re-engineering Project

Data Themes - Outline - Archeology

I. Acquisition

A. Data Source

1. Producer Information

a. Name

Each individual State Historic Preservation Office has authority for archeology data. State Historic Preservation Offices are mandated by congress to collect this data. However, congress gave no funding and the governor appoints a person and each state handles archeology data differently.

At the federal level, the National Park Service, US Forest Service, Bureau of Land Management and US Fish and Wildlife Service also have or are developing archeology databases for the land that they manage. There is a interagency cooperative agreement.

b. Location of Headquarters

Each state office or the federal agency.

c. Internet Address

None.

2. Publisher Information

a. Name

Archeology site location is sensitive information. It is not published because of the concern that people would be digging at the sites. The data is exc luded from the Freedom of Information Act. Even within agencies, the data is protected on a need-to-know basis and is read and certainly write password protected. The data is only available to those with a legitimate need.

Many State Historic Preservation Offices have only paper maps or flat files and no GIS data.

b. Location of Headquarters

Sarah Bridges is the National Cultural Resources Specialist and Federal Preservation Officer, at national headquarters for NRCS. She is the primary contact and is coordinating with the various efforts of the federal agencies and State Historic Preservation Offices.

(202)720-4912 sarah.bridges@usda.gov

A database is being constructed at national headquarters but actual site location is not the mission at national headquarters.

Sarah Bridges provided the contact David Skinas at NRCS, Vermont (802)-828-4493 who is building a Customer Service Toolkit and Archeology proto-type. She also provided the contact Al Spencer in the Northwest (503)414-3204 who has been working with archeology issues and data for a long time.

Daniel Martin from the BLM Service Center in Denver 303 236-0105 dwmartin@sc.blm.gov is in the Cultural Heritage, Wilderness & Special Areas, Paleontology Group and is a good source of information on archeology data and efforts to coordinate use and availability. He coordinates with the State Historic Preservation Offices and NPS terry_childs@nps.gov He is involved with the Western MetatData Working Group.

The BLM have committed to vest in State Historic Preservation Office data systems rather than to support parallel and potentially conflicting systems of their own. The BLM is working with FGDC on standards and metadata. So far, the only standard is state by state. The BLM gives data to the State Historic Preservation Offices then the BLM relies on State Historic Preservation Offices to provide the data back to them when needed.

The national Park Service is involved in an interagency cooperative agreement. They are involved in National Archeology Data base (NADB) and have a database called MAPIT.

c. Internet Address

3. Acquisition Information

a. Delivery Media

Service Center personnel who are authorized to know about this data must contact the State Historic Preservation Office to see if there is an archeology site on land where a conservation practice is going to be installed. Only certain personnel in a service center are allowed to look at or know about the data.

b. Download URL

There is a very nice prototype site for the State or Arizona that is using Arc SDE and allows password protected download and upload of archeology data. The URL is http://archaeology.la.asu.edu/azsite/

State of Kansas Geographic Information Systems Initiatives, Data Access and Support Center (DASC) will be constructing an archeology layer during 1999. The contact is Travis Rome, state GIS coordinator for NRCS who is also on the Data AID team. The URL for DASC is http://gisdasc.kgs.ukans.edu/

CAST at University of Arkansas has USA national coverage of archeology. However, it is Grass raster data that is density per county and is not site locations and tabular data. They do have point data for Arkansas. The URL is http://www.cast.uark.edu/other/nps/maplib/

Another state that is making good efforts with archeology is Wyoming. The Wyoming State Historic Preservation office, Wyoming Cultural Records offices maintains a site at http://colby.uwyo.edu/

c. Projected Data Availability Schedule

Maybe never.

B. Standards Information

1. Geospatial Data Standard
    a. Standard Name and Steward Information
    b. Standard Version
    c. Standard URL
2. Metadata Standard
    a. Standard Name and Steward Information
    b. Description of Metadata Captured
    c. Metadata Accuracy and Completeness Assessment

C. Acquired Data Structure

1. Geospatial Data Format
    a. Format (raster, vector, etc.)
    b. Format Name
    c. Data Extent
    d. Horizontal and Vertical Resolution
    e. Absolute Horizontal and Vertical Accuracy
    f. Nominal Scale
    g. Horizontal and Vertical Datum
    h. Projection
    i. Coordinate Units
    j. Average Data Set Size
    k. Symbology
2. Attribute Data Format
    a. Format Name
    b. Database Size
3. Data Model
    a. Geospatial Data Structure
    b. Attribute Data Structure
    c. Database Table Definition
    d. Data Relationship Definition
    e. Data Dictionary

D. Policies

1. Restrictions
    a. Use Constraints
    b. Access Constraints
    c. Certification Issues
2. Maintenance
    a. Temporal Information
    b. Average Update Cycle

E. Acquisition Cost

1. Cooperative Agreement
    a. Description of Agreement
    b. Status of Agreement

2. Cost to Acquire Data

II. Integration

A. Value Added Process

1. Benefit to the Service Center
2. Process Model
   a. Flow Diagram
   b. Process Description
3. Technical Issues
   a. Tiling
   b. Compression
   c. Scale
   d. Tonal Matching
   e. Edge-matching
4. Quality Control
   a. Procedures
   b. Acceptance Criteria
5. Data Steward
   a. Name and Organization
   b. Responsibilities

B. Integrated Data Structure

1. Geospatial Data Format
   a. Format (raster, vector, etc.)
   b. Format Name
   c. Data Extent
   d. Horizontal and Vertical Resolution
   e. Absolute Horizontal and Vertical Accuracy
   f. Nominal Scale
   g. Horizontal and Vertical Datum
   h. Projection
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2. Attribute Data Format
   a. Format Name
   b. Database Size
3. Data Model
   a. Geospatial Data Structure
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   d. Data Relationship Definition
   e. Data Dictionary

C. Resource Requirements

1. Hardware and Software
2. Staffing

D. Integration Cost

1. Hardware and Software
2. Staffing

III. Delivery

A. Specifications

1. Directory Structure
   a. Folder Theme Data is Stored In
2. File Naming Convention
   a. List of Theme Files and The File Naming Convention

B. User Information

1. Accuracy Assessment
   a. Alignment with Other Theme Geospatial Data
   b. Content
2. Appropriate Uses of the Geospatial Data
   a. Display Scale
   b. Plot Scale
   c. Area Calculations
   d. Decision Making

C. Maintenance and Updating

1. Recommendations and Guidelines
   a. Frequency of Updates
   b. Location for the Theme Data to be Maintained
   c. Maintenance and Updating Procedures Overview